



Water pressures

District strategizes to meet demand, save

01:18 AM PST on Sunday, January 8, 2006

By TIM O'LEARY / The Press-Enterprise

TEMECULA - Water consumption throughout much of Temecula and Murrieta -- demand that tripled over 25 years -- is expected to double again before the area's growth ebbs by about 2050, local officials predict.

To meet this new demand, Rancho California Water District directors will rely heavily on a privately-owned lake and a network of groundwater basins, key assets cited in a \$300,000 strategy aimed at boosting local supplies and limiting the area's dependence on costly water that is imported from the Colorado River or Northern California and then treated at a Lake Skinner plant.

District officials say the recently adopted resources plan will allow them to meet future residential and commercial demands while providing a more reliable supply for vineyards and avocado and citrus groves.

"This gives us the road map on where we're going in the future," said Ben Drake, president of Rancho's seven-member board. "What we're trying to do is design a system that will allow us to meet that future demand."

And while the plan calls for \$78.1 million to be spent on new wells, pipelines, pump stations and other projects, little of that is expected to come from current or future customers.

"This really should be self-funding," said Perry Louck, the district's director of planning.

Providing a reliable water supply for area farmers, the first group of customers to face mandatory cuts in times of drought, is key to retaining the area's agricultural identity, said Drake, who manages vineyards and avocado and citrus groves throughout the area.

District water demand has climbed from about 25,000 acre-feet per year in 1980 to an anticipated 76,100 acre-feet this year, according to the study. Demand throughout the same area is expected to reach about 142,000 acre-feet by 2050, which is when most large parcels of land will be covered by homes, public buildings or businesses.

An acre-foot of water, about 326,000 gallons, is enough to meet the needs of a family of four for about two years.

Planning Payoff

The Rancho strategy, which took more than a year to complete, must be followed by feasibility studies that are expected to cost \$1 million, Louck said.

While that might seem like a lot of money, the planning is expected to pay off, he said. If successful, the plan would allow the district to keep about \$12 million a year rather than spend it on ever-increasing supplies of water imported from the Metropolitan Water District of Southern California.

But rather than discourage such measures, Metropolitan officials say they favor resource studies that aim at boosting

local supplies.

Such strategies are crucial as Southern California grapples with droughts, mushrooming growth and reduced Colorado River supplies, said Stephen Arakawa, Metropolitan's water resources manager.

Planning work done by Metropolitan about a decade ago and similar strategies undertaken by some of its member districts are already bearing fruit, Arakawa said.

When Metropolitan's planning began, imported water supplied about 60 percent of Southern California's needs. The imported supply has since dropped to about 50 percent of the region's consumption, he said.

As a result of the lower demand and other factors, Metropolitan was able to keep pace with growth while shaving about \$3 billion from its slate of proposed capital projects, Arakawa said.

"That's pretty substantial," he said.

Arakawa said Rancho is fortunate to have Vail Lake and a series of groundwater basins as tools to meet the region's growing demands.

Potential Projects

Crucial aspects of Rancho's strategy include boosting Vail Lake's levels by installing a \$5.5 million pipeline that would allow the district to store more water there. An additional \$20 million would be spent to install another set of pipes to move lake water to the area's Wine Country, which now depends on treated water to irrigate crops, process wine and meet other needs.

The increased water stored in Vail Lake, which is about 15 miles east of Temecula, would also be used to recharge groundwater basins. Eighteen new wells would be drilled at a cost of about \$22.5 million to pull stored supplies from those underground basins.

The lake currently stores water that flows into it during rainstorms. When water is needed for local use, the district releases flows into Temecula Creek, where it reaches a percolation area for seepage into underground basins. That water can then be pumped from the basins to customers' homes and businesses in two to three days.

Vail Lake contains about 34,000 acre-feet of water, of which more than half can be extracted if needed. Rancho officials hope to increase the lake's storage to about 40,000 acre-feet once a pump station and almost three miles of 4-foot diameter pipe are built.

Matter of Flexibility

Increasing the amount of water stored in the lake could give Rancho greater flexibility to move it to homes, businesses, groves or vineyards as needed.

Meanwhile, the irrigation of avocado and citrus groves west of Temecula would shift from treated water to recycled water.

The removal of salts that now prevent the use of recycled water for agricultural uses would be accomplished through the construction of other pipelines, a pump station and a treatment plant that are expected to together cost an additional \$20 million.

The cost of the construction projects would be offset by the price difference between the types of imported water that Rancho purchases.

Treated water, needed for homes and businesses, costs about \$100 an acre-foot more than untreated water, which is the type that would be pumped into the lake to recharge groundwater basins and irrigate crops. That price disparity is expected to climb even higher over the next 45 years, officials said.

"It's not getting any cheaper," Drake said.

Reach Tim O'Leary at (951) 375-3733 or toleary@pe.com

Survey

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Why or why not? Comment**

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